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Group

Mr Tappington

1824

Tringoides. T. pallidus.

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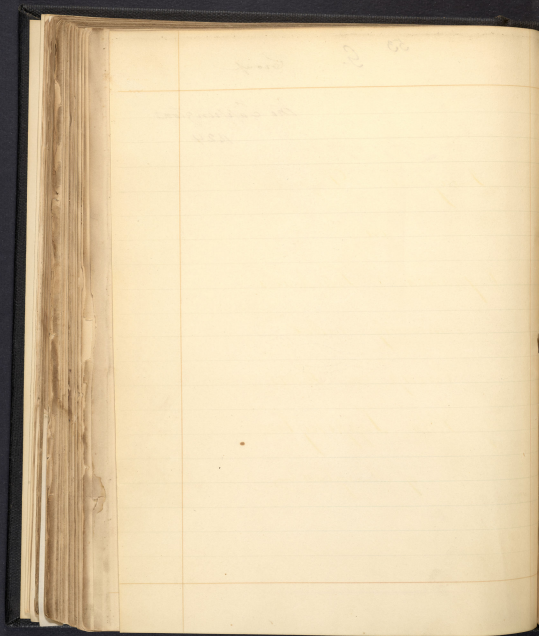
Cynanche Trachialis

commonly called

Group or River

by John Tappington

of Kingston



Revised March 15

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Larynx An Dysphagia

Inaugural Dissertation

Doctor on Medicine

Cynanche Trachealis

commonly called

Croup or Whooping Cough

By John Lappington

of Maryland

March 1888

Journal of the

on

Spanish

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of the

Revised March 15th 1824

An
Inaugural Dissertation,
for the Degree of
Doctor of Medicine
submitted To
The Examination
of the
Trustees and Medical Professors
of the
University of Pennsylvania
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Rec'd June 15 1894

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for the year of

Order of the

The Examination

Tests and Annual Report

of the

University of Pennsylvania

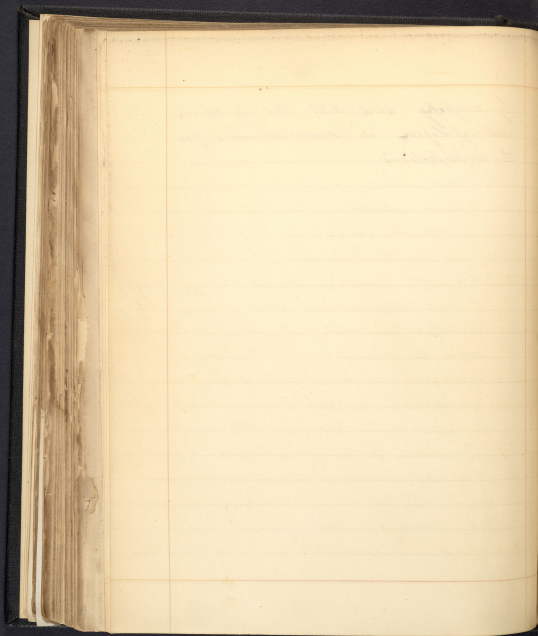
in the year of 1893

Preface

I have chosen for the subject of my Inaugural Dissertation Cynanche Trachealis.

The motives which led me to make this disease the subject of my thesis ^{was} ~~were~~ because it prevails much in the state of Harford county Maryland and my having had some opportunities of witnessing its progress. It would be more congenial to my inclinations to glide through the process of graduation without a thesis but as the laws of the University require a dissertation from every candidate for medical honors I am compelled to submit this to the inspection of the professors and hope that its being the production of a juvenile mind impelled

by necessity and not led by choice
will apologise in some measure for
its imperfections



An
Inaugural Dissertation &c

Zoology perhaps does not furnish a disease which has received a greater variety of appellations than the one under consideration:

It is the Acute Asthma of Dr Miller;*

The Catarrhus Suffocatus of Etmulæ†

The Morbus Strangulationis of Stæ;‡

The Angina Polyposa of Michaelis;||

The Suffocatus Stridulus of Dr Home;§

The Cynanche Trachealis of Dr Cullen;¶

* Miller on Asthma and Whooping Cough

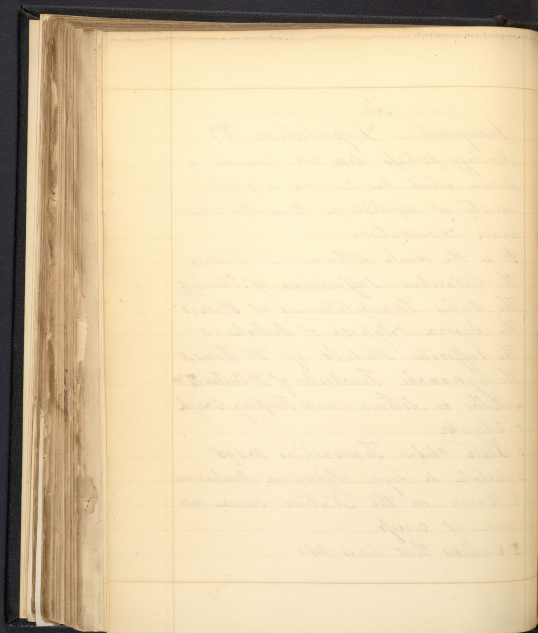
† Etmulæ

‡ Stæ Philos. Transactions N.º 495

|| Michaelis de Angina Polyposa sive Membranæ

§ Home on the Nature Cause and cure of Croup.

¶ Cullen's First lines Vol 1



From this variety of appellations, I have selected that of *Cynanche Trachealis*; not because I conceived it more proper than some of the others, but because the works of Dr. Cullen being in the hands of every one, the term must be familiar to all.

It appears to be a disease to which the younger part of the human race is in a peculiar manner obnoxious: from the unequivocal instances, which Dr. Chapman has related of its occurrence in the adult* (And I see no reason why, under particular circumstances, it may not appear in the adult subject) I can by no means subscribe to the opinions of those authors, who assert, that it only occurs within the first twelve years of life.

* Professor Chapman's M.D. Lectures

the same kind of application, I
have made this of the same kind
and I have to confess it was
more than once in the office, for
the sake of the work of the office, I
in the hands of my own hands
and so I have to do.
It seems to be a case of which
the chief part of the business is
a general statement of the
the business of the office, and I have
to state of the business in the office
and I see the same kind of work
the circumstances of the office
in the office (which I have to do)
more than in the office, for
the same part, that is the same
with the first kind of work.
The business of the office

I shall however consider myself sufficiently well supported by the concurring testimony of all writers, and from what little I have observed myself, when I say it occurs fifty times in children, (or perhaps a much larger majority) where^e it does once in the adult.

It is said to be much more frequent in its appearance during the spring and autumnal months. There is, however, no season of the year, situation, nor climate, that does not afford proofs of this disease. At the all situations afford~~ed~~ proofs of its existence, there is, in my opinion, sufficient reason to believe it is much more frequently found in those situations, which from their vicinity to marshes, rivers and other bodies of water, are constantly under the influence of cool,

moistened atmosphere.

I know the disease takes place, in a far greater number of instances in the low marsh lands, called the Neck ~~situ~~ ⁺ ated in that part of Maryland which lies between the Chesapeake Bay and Bush River, than it does in the upper lands, called the Forest.

It is found in a high degree rapacious (if I be permitted the expression) of those children, who are by nature furnished with dispositions the most lively, with constitution the most robust and with health the most blooming. Writers mostly represent it as ~~the~~ ^{most} ~~common~~ ^{frequent} among children of the lower class; perhaps this may be the fact, but it is so far from being exclusively confined to the poorer children, that it is (I had almost said) a common disease in

families of all ranks. Some writers affirm
that the croup does not appear in childhood,
while ~~they~~ ^{are} at the breast, ~~it is~~
~~not~~ ^{is} dangerous; but on the contrary
we have the authority of Dr. Chapman
when describing this disease, in the fol-
-lowing words, viz "It is confined in most
part from one to five years old, but I have
seen it in children, in the month and in old
age, but this is rare * and Alexander who
has written an ingenious treatise on this
disease says "Children while at the breast,
"are not unfrequently attacked with it; and
"I have known three or four instances in
"which it has seized infants at the early
"period of six months after birth."†

On the contagious nature of the Cynanche
* Professor Chapman's M.S. Lectures

† Alexander on Croup page 13

Trachealis, I can say nothing from my own observation; it has been believed by some; doubted by others; and disbelieved by many.

If its so it is very far from being uniformly contagious; I can very easily conceive that the operation of the same causes might produce it in an hundred different instances, even within the limits of a small neighbourhood.

I do conceive it in many instances inflammatory even what are called Spasmodic, if continue long the mucus membrane becomes inflamed &c.

As the Inflammatory and Spasmodic Croup require the same treatment or nearly so I shall content myself with describing the disease and the method of cure.

Symptoms

In the generality of cases, of the *Cynanche Trachealis* is ushered in with the usual phenomena of fever; such as slight shiverings, attended with heat, languor, and other symptoms, indicating the presence of a febrile state of the system; a slight degree of hoarseness follows, accompanied with a dry cough, unattended for the most part with expectoration; and the whole bears a resemblance to a common cold as to be almost universally mistaken for one. Thus this disease advances; the tongue becomes white; appetite is lost; respiration and pulse much quicker; there is commonly a degree of soreness complained of about the larynx, but very seldom attended with swelling; deglutition is scarcely at all affected; much restlessness and anxiety prevails

eruptions sometimes appear on different parts of the body; voice is shrill and sharp; the face becomes flushed and turgid with blood; hoarseness and cough advance in violence; the muscles of the abdomen and thorax are thrown into such violent action by the respiring efforts of the patient, Dr Rutty mentions this disease as being epidemic in Ireland; it but does not say it was contagious.

Physicians have cavilled not a little concerning the inflammatory nature of the Cynanche Trachealis some; considering it as a well marked inflammatory disease, whilst others view it as entirely unconnected with even a common symptom of inflammation.

* Boerhaave

† Rutty! Chronological History on the weather

Dr Rush the learned and ingenious late
Professor of the institutes of Medicine &c
whose authority was at all times of the
most superior kind considered it as
inflammatory disease and ranks it
as a grade of the Anginose state of Throat
Much has been said against being an
inflammatory disease because dissections
so seldom discover any marks of infl-
ammation

There are however dissections on record to
prove that inflammation, is found, it but
even if no marks of inflammation were
found on dissection, it would not prove
the contrary for I can conceive that the
vessels may be so far relieved by an effu-
sion that not even the vestige of such

* Rush's inquiry and obsv. Vol 4

+ Horne on croup Alexander on croup Baillie's Anody

a state shall be found: Now we know
very well children, seldom die of this
disease; until the vessels have in some
instances nearly and in others entirely
relieved themselves by effusion of course
are opened only in this situation.

such is the general rise progress and termina-
tion of the Cynanche Trachealis though it
sometimes attacks with all the suddenness
of an apoplectic paroxysm and this
most generally while under the pleasing
influence of refreshing sleep.

This disease runs its course in different
periods of time; it often destroys the
patient in twenty four hours from the
attack; more frequently it terminates in
two, three, and four days; and some
authors say much longer time.

The immediate cause of these grievous

symptoms, dissections have proven to be
in the trachea, and extend into its
most minute ramifications.

Many different opinions are held respect-
ing the nature of the preternatural me-
mbrane, found lining the interior of the
trachea; for which some consider it as
inspired mucus,* others contend that
it is coagulable lymph;† It is a point
of controversy, on which I feel myself
wholly unprepared to decide. But I can
conceive that it may at one time be
inspired mucus, and at another
coagulable lymph. We have analogies
in favour of each, in different parts of
the system, under certain circumstances.

* *Homer Inquiry &c*

† *Alexander on Croup*

Diagnosis

This disease so much resembles a common cold in its commencement, that it has almost uniformly been mistaken for one. It may, however, be distinguished from a cold, by being most generally unattended with sneezing, and effluxions from the eyes and nose, and by the cough being accompanied with a peculiar sonorous *rauche*, that no doubt is left as to the existence of a mechanical obstruction in the trachea.

The sound emitted during inspiration has been compared to the craking noise made by a young hen* to the crowing of a cock† and to the barking of a little dog or fox‡

* Michaelis de *Angina Polyposa* &c.

† Hornet Inquiry &c.

‡ Rush! ingr and obstruction &c.

Respiration is evidently much worse
by paroxysms, this is most probably owing
to the irritation of the lymphatic, incrus-
tation or layer of membranous looking
substance forming in the trachea, ex-
citing the muscles of the glottis into a
spasmodic action which diminishing
the opening through the ramis glottidis
is followed by respiration more laborious
and after intervals of less difficulty.

Thus this truly distressing disease
proceeds in its career, and is succeeded
by a train of symptoms, which only add
to the well founded alarm of parents
and attendants.

The countenance, in some instances, becomes
pallid, in others a full and lived hue,
owing to the returning blood being denied
a free passage through the lungs in

consequence of an almost totally obstructed respiration. The patient becomes drowsy, but is prevented sleeping from the violent exertions of the respiratory organs; the system becomes exhausted; the pulse languid and tremulous; coughing can no longer be effected; the eyes are unspread with a glairy appearance; convulsions frequently come on, and the unhappy sufferer expires under all the appearance of strangulation ~~and a~~
~~shrill sharp voice. As it advances every~~
~~doubt is removed.~~

It cannot be mistaken for Whooping Cough the latter is attended with paroxysms very evident and violent and during the intermissions is not attended with the steridulous respiration of the Whoop. A view of the internal fauces will readily

satisfy the most superficial observer that it is neither *Cynanche Tonsillaris* nor *Maligna* they are accompanied with much pain and difficulty of swallowing from the inflamed and tumid state of the tonsils and are not attended with the croupy inspiration.

Remote Causes

These are all such as induce debility, either directly, or indirectly.

Among those which act directly, are
1 Cold. Cold especially when combined with moisture, I believe to be by far the most frequent remote cause of the *Cynanche Trachealis*. Hence we find it more frequently occurring in those situations, and seasons which afford a cold, damp atmosphere.

With the general debilitating effects of cold, it has a particular local action on the trachea.

2 Preceding diseases, as small Pox, Measles, Catarrhic affections, and Whooping cough, thus all produce a debility, that disposes much to Cynanche Trachealis.

Other causes, by acting directly, may predispose to this disease; but those I have mentioned are much the most common.

Those causes which act indirectly, ^{or} predisposing to the disease, are,

- 1 Heat, ~~and inflammation~~
- 2 Fatigue, whether induced by bodily exercise, or excessive crying, predisposes the system to an attack of this disease. crying acts both generally and locally.

Predisposing Causes

The predisposing cause of this disease, as well as all other febrile diseases, as fully illustrated by Dr. Rush,* is Idleness.

Exciting Causes

The exciting causes are stimuli of all kind, as

- 1 Heat. Heat, succeeding cold, I believe to be much the most frequent exciting cause of the Cynanche Throatitis.
- 2 Intention. may very properly be mentioned here.
- 3 A saline Atmosphere, where this disease occurs near the sea coast, is mentioned by Dr. Horns, as a cause.† In fact, any thing which will excite

* Rush's works

† Horns inquiry &c page 40

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the system into action, may, with propriety, be ranked under the big head of exciting causes.

Proximate Cause

Various, indeed, have been the sentiments of authors, respecting the proximate cause of Cynanche Trachealis.

I can consider the proximate cause, and disease, than as different terms, expressed in the end of the same thing; can we then suppose that Cynanche Trachealis to consist in an increased secretion, or in a membrane formed in the trachea, &c? From viewing the subject, these quills, certainly, appear to be no more than mere effects of the disease, or, in other words, of the proximate cause.

The first and last, say, with
highest, it can be seen the
and a single, common

THE FIRST BOOK

THE FIRST BOOK OF THE
HISTORY OF THE
CITY OF LONDON
FROM THE FOUNDATION
TO THE PRESENT
TIME
BY
JOHN STOW
1597

From what I have said, and as I have given a description of the disease, the reader will no doubt suppose I am not going to give any proximate cause: I certainly think it unnecessary; yet as it is so customary, I flatter myself he will, with me, view the proximate cause as accompanied with irregular or convulsed action in the arterial system, but determined, in a more particular manner, to the trachea, and its bronchial ramifications.

Prognosis

There is perhaps no way, in which Physicians have more frequently exposed themselves to the contempt and ridicule of the world, than in the prognosis of diseases. They should avoid deciding positively, as to the event of any disease.

"It is impossible" say Dr Rush "in
acute diseases, to tell when life ends,
and when death begins.

Hundreds of patients have recovered,
who have been pronounced incurable,
to the great disgrace of the profession*
more danger is always to be appreh-
ended, when this disease attacks sud-
denly and violently. The greater the
fever, and the more difficult the
respiration, the more hazardous are
we to esteem the event. Should the
reverse of these occur, with a cough
attended with expectoration, especially
should they take place after the use
of the remedies to be hereafter recomm-
ended; we may give encouragement
on good grounds.

* Rush's ing. and Observ. Vol 1

I should always be backward in pronouncing an unfavorable prognosis, unless symptoms of the most extreme danger appeared; such as quick, short, and difficult respiration; inability to swallow; weak, tumultuous pulse; fainting; coldness of the extremities, and convulsions. &c.

Method of Cure

In proceeding to the mode of treating Cynanche Trachealis, our indications will naturally be -

- 1 To moderate and remove the fever.
- 2 To remove the preternatural membrane or mucus in the trachea and the spoon.
- 3 To prevent a return of the disease.

To answer the first indication, the most effectual remedy is,

- 1 Blood-letting both general and topical

has often given immediate relief. All authors concur in the propriety of using the Lancet; and hence I cannot but regret the mistakes parents have been led into, by considering this disease as nothing more than a common cold; they delay taking the advice of a Physician until the disease has increased in violence, and relieved itself, to a considerable degree, by a discharge, which, in a great measure, blocks up the very passage through which life is carried on.

It should be used in the earliest stage of the disease; the frequency of its repetition, and the quantity of blood to be drawn, must, at all times, be left to the discretion of the Physicians. All he will have to do, will be, to attend

to the pulse, and state of the system;
these done, it will be impossible for
him to err.

2 To Answer. the second indication, an
Emetic composed of Tartarized Anti-
mony, Specacuanha, and Calomel,
are one of the best remedies; it has
often cured the disease, when given
in the forming stage, especially where it
is assisted with the warm bath. my
Further " says he has never known
it to fail of producing relief especially
if the Calomel, be given in large enough
doses, as to produce active purging, and
has rarely found it useful to use any
other remedy, except a repetition of
calomel, to keep the bowels open.

Blisters have been warmly recommend-
ed in croup, the remedies already

laid down will be sufficient during the first stage of the disease, the only time Histers are of service is in the latter stage of the disease.

To answer the third indication is, to prevent a return of the disease.

If the patient be much reduced by the length or violence of the disease, a decoction, or vinous infusion, of Peruvian Bark; with a generous diet may be allowed; and the patient should be removed into a dry pleasant atmosphere.

With this then, I finish my Inaugural Dissertation, but before I close it entirely, I beg you, Illustrious Professors, who have so eminently distinguished yourselves in teaching the science of medicine, in its different extensive

branches, and from whom I hope I
shall receive the highest honors of
the profession, will accept my best
wishes for your happiness, and be
assured that for the many instances
of friendship you have on many
occasions shown me, I shall ever
retain a heart felt remembrance

I think, and from whom I
have taken the highest view of
the subject, and which I will
submit for your judgment, and to
show that for the many reasons
I think that you have no doubt
of the wisdom of the course
which I have followed.